Amador County Pesticide Use Enforcement Work Plan
2010-2012

County Resources

- Deputy—40% of time in PUE
- Agricultural Inspector—in training, 40% of time in PUE
- Over the span of the work plan, staff responsibilities may change as Inspector becomes more experienced
- All staff have vehicles for exclusive use
- Each vehicle has radio contact with office and other staff in the field
- All staff have computer workstations for issuing restricted materials permits and operator ID numbers, each with access to internet and email
- Two workstations are compatible with Arcview 9.0 and are used for GIS mapping
- Currently using AgGIS for permit/OPID issuance

A. Restricted Materials Permitting

Permit Evaluation

- Approximately 65 restricted materials permits issued annually
- Majority of permits are issued for phenoxy herbicides, paraquat, strychnine, zinc phosphide, and aluminum phosphide
- Permits are approved and issued by two licensed staff
    - Deputy-40% of PUE duties
    - Agricultural Inspector-25% of PUE duties
- For new permits initial contact by phone or in person to prescreen for hazards necessitating denials
- Permit approved through verification of having passed private or qualified applicator certification exam
- County administers private applicator certification exam on an individual basis
- Appointment is required for permit issuance and certification exam
- Permit issuance takes approximately one hour
- Testing takes approximately one hour
- During issuance we conduct review of adjacent and surrounding properties based on the following to determine potential adverse environmental impact or health effects:
    - Maps submitted by the applicant or prepared by GIS aerial photographs
    - Discussion with the applicant
    - Knowledge of the local area
- Permits are denied or conditioned recognizing and utilizing appropriate mitigation measures
- If a permit is denied the applicant will be given due process in the form of a notice and an opportunity to be heard
- Permits are entered into AgGIS, never issued on PR ENF-125, and printed out for signature

- Permits are issued to operator of property or authorized representative (either an employee, farm management firm or PCA), non-ag permits are issued to PCB
- Letter of authorization required for issuance or signature of other than operator of property
- Permits are valid for one year, expiring at the end of the calendar year in which they are issued
- All agricultural permits are site specific and maps are required
- Sites are identified by a three digit alpha numeric system, typically the letter identified with a map and the number identified with a location or commodity within map
- Homes, wells, adjacent environment, and sensitive areas are identified on maps
- Handouts reviewed with permittee at time of issuance:
    - In house pesticide use requirements
    - DPR pesticide use requirements PR-ENF-116
    - PUR form and instructions
    - Restricted material permit conditions
    - Notice of intent log and instructions
    - California restricted materials list
    - DPR WPS brochures
    - Handler and fieldworker training program/records
    - Application specific information requirements
    - PSIS A or N 1-11
- For permit amendments, a notation is made on the permit for small changes, while larger, more significant changes require the permittee to sign and date the amendment
- Permit/certification renewals usually occur after county sponsored continuing education opportunity/training offered in December
- Three scheduled CE/training sessions
- For renewals, prior year permit files are reviewed for PURs and inspections to determine any potential problem areas
- Permits that include restricted material use pesticides that have not been used in the previous year are reviewed with permittee during permit renewal season to eliminate these pesticides from the permits

<u>Strengths</u>

- Staff knowledge of local conditions helps to reduce substantial adverse environmental impacts
- Currently there is a low level of ag-urban interface issues
- Very low level of cropping pattern problems
- Historically there have been few to no instances of permit denials due to potential adverse environmental impacts
- Issuance of one year permits even for permanent crops allows for regular review of permits, reducing chances for potential adverse impacts
- Specific permit conditions are generally never required due to the cropping patterns and types of restricted materials used

- 75% of the agricultural permit sites have been GPS mapped and sensitive sites and wells identified on them. New permits are mapped with aerial photography through the AgGIS permit system or the county GIS system
- County aerial photographs are current as of 2006

Weaknesses

- Staff has limited knowledge about specific pesticides, their labeled uses, and mode of action; one staff member still in training and not experienced in restricted material use

Goal or Objective

- Assure that the evaluation process for restricted material permit applications is complete and thorough, taking into consideration all aspects of risk assessment through the use of updates and improvements to permit information necessary to make sound determinations on adverse effects.
- Improve the restricted materials permit application process through additional label review for new product usage

Deliverables

- Review county GIS parcel data and aerial photographs prior to issuing new restricted material permits to assess potential adverse effects.
- Evaluate 100% of restricted material permits where adjoining site conditions have changed for potential adverse environmental impacts.
- Approve, deny, and condition permit as necessary. Ensure due process.
- Review and amend permit conditions to be pesticide specific and site specific when necessary

Measure Success

- Review all restricted material permit files for the following corrective actions:
    - Site specific color GIS and aerial photo maps
    - Elimination of restricted materials not used for the last year
- Identify number of permits lacking corrections
- Review of occurrence of adverse incidents where we had a high degree of control based on corrections implemented to permit and NOI review process

Site Monitoring Plan Development

- Approximately 323 annual sites
- Approximately 75 NOIs are received a year
- 24 hour NOIs are required

- NOIs are accepted by telephone to the main telephone line, fax, or in person and are monitored between 8 am-5 pm, Mondays –Thursdays.
- After hours the NOIs are picked up by answering machine. No NOIs are picked up by staff on weekends
- The secretary transcribes NOIs to an in house log that is kept in a file in the office
- Licensed staff review NOI log periodically to assure consistency with permit and contains required information
- Majority of NOIs are for the following restricted materials/crops:
    - Phenoxy herbicides for forest, received during April and May
    - Phenoxy herbicides for forage crops, received during January through April
    - Paraquat for wine grapes, received during December through March
    - Aluminum phosphide and strychnine for wine grapes, received May to October
- NOIs are reviewed by one licensed staff
    - Deputy – 10% of PUE duties
- Sites to evaluate are based on:
    - hazard of pesticide use by crop
    - previous denials
    - aerial applications
    - applications near roads and residences
    - environment condition with respect to cropping and fieldwork patterns
    - local conditions
    - employee handlers
    - compliance histories
- Pre-application site inspections are performed as resources allow
- All nonagricultural permits are required to submit an NOI until one inspection has been performed which is usually accomplished when the renewal occurs for an upcoming application

<u>Strengths</u>

- Staff with knowledge of local conditions and cropping patterns
- Few types of restricted materials used on a few crops
- Minimal changes to adjacent environments of sites to be monitored

<u>Weaknesses</u>

- Many NOIs are submitted on weekends making it difficult to conduct review of NOI prior to application as no staff works on weekends
- Limited staff availability for site monitoring
    - Our county is under mandatory Friday furloughs through June 2010 and most likely to continue through June 2011 so staff is only available to review NOIs Monday-Thursday
    - Majority of site monitoring occurs at a time of year when licensed staff is performing other duties such as issuing renewals for permits and operator identification numbers or performing county roadside vegetation management

Goal or Objective

- Assure that site-monitoring for restricted material use is effective, preventative and comprehensive, taking into consideration the following risk factors:
    - Pesticide hazards associated with
        - phenoxy herbicides
        - paraquat
        - strychnine and zinc/aluminum phosphide
    - Local conditions
        - new residential developments within the ag-urban interface
    - Cropping and fieldwork patterns
    - Compliance histories
        - employee handlers
        - permittee
        - pest control advisors

Deliverables

- Record and evaluate all NOI's
- Use the pesticide pre-application site inspection, compliance actions and NOI denials to increase compliance with 24 hour NOI permit requirement.
- Review of NOI log to determine if:
    - Increase in timely reviews of NOIs by staff occurred
    - Reduction in number of non-compliances for 24 hour NOI requirement
- Each NOI will be reviewed by licensed staff to ensure:
    - Valid Restricted Materials Permit for material to be applied to the intended site
    - Crop or application site is allowed by label/Section 18/permit conditions
    - Method of application is allowed by pesticide label & permit conditions
    - Dilution/volume per acre is appropriate
    - Material is appropriate for the pest to be controlled
    - Surrounding areas will not be adversely impacted by application
- Record all reviewed NOIs on PRAMR
- Pre-application site inspections will be performed on a minimum of 5% of NOIs.
- All NOI's that are denied shall be recorded on a NOI denial form and counted for the PRAMR and filed.
- Requests for recommendations will be increased to better evaluate risks associated with proposed applications.
- Implement phenoxy herbicides recommendations established by Sacramento Valley Deputy Group for buffers around vineyards during March – October to establish consistency within the foothill communities

Measure Success

- Review of PRAMR to determine if all reveiwed NOIs have been accounted for

- Review of PRAMR to determine if required 5% pre-application site inspections were performed
- Review success of Phenoxy buffers and recommendations for decrease in potential or actual risks

B. Compliance Monitoring

Comprehensive Inspection Plan

- Inspections are performed by two licensed staff
    - Deputy-20% of PUE duties
    - Inspector- 75% of PUE duties
- Inspections are performed between 7 am-4:30 pm, Mondays-Fridays
- 60% of inspections are scheduled
    - grower and pest control business headquarter safety and records
    - pre-application site
    - restricted materials
- Majority of scheduled restricted material application inspections occur between December and April when weed control takes place for field crops with phenoxy herbicides and for wine grapes with paraquat
- 25% of the inspections are targeted and are concentrated in the major agricultural pesticide application area, the Shenandoah Valley, where wine grapes are grown
- Targeted inspections are prioritized by:
    - Applicator compliance history
    - Employee handlers
    - Environmental concerns
    - Chemical hazards
- 15% of inspections are random in urban areas
    - landscape maintenance
    - structural pest control businesses
- Surveillance for non scheduled application inspections occurs depending on availability of staff

Strengths

- The size and centralized location of the agricultural pesticide application areas allows for an intimate familiarity with pesticide usage and cropping patterns in the county.
- Implementation of a comprehensive GIS site-mapping program.
- Implementation of a non-compliance tracking system utilizing copies of all inspections in permittee file and annual comparison spreadsheet
- A targeted inspection plan that addresses the following components:
    - Violation history
    - Potential for WHS violations
    - Employee handler applications

- Low level of Category I pesticides being handled by employees requiring closed systems
- No use of dormant sprays
- Currently no identified groundwater protection areas in county
- The frequency of headquarters employee safety inspections is currently every 2-3 years depending on the level of non-compliances. The frequency of dealer inspections is every 1-2 years. This frequency schedule allows for effective identification and enforcement action of non-compliances.

Weaknesses

- Limited staff availability for compliance monitoring
    - Weekend or night time work when owner operator and reduced drift applications occur
    - Low number of follow up inspections
- Accessibility to sites is restricted due to locked gates and inability to visually see sites from the road to verify application activity

Goals or Objectives

- Assure that compliance monitoring is effective and comprehensive, ensuring the safety of pesticide handlers, fieldworkers, the public, and the environment through the use of an inspection strategy that has a measurable effect on compliance improvement.
- Increase compliance with pesticide laws and regulations involving pesticide use within Amador County.
- Outreach on compliance with dormant spray regulations
- Outreach on increase of awareness of surface and groundwater issues confronting California pesticide users

Deliverables

- Maintain frequency of inspections for headquarters and dealers
- Maintain targeted inspections for situations where WHS violations have occurred in the past or have the potential to occur
- Increase targeted inspections when necessary for repeat violations.

Measuring Success

- Review of PRAMR to determine if there has been a decrease in the number of pesticide use and records inspections for targeted components.
- Review of non-compliances as a result of targeted inspections.
- Decrease in non-compliances found.

Investigation Response and Reporting Improvement

- Pesticide-related investigations are conducted by one trained staff:
    - Deputy responsible for 100% of investigations, 10% of PUE duties
- Complaints are received by secretary and recorded on an in-house form
- Once received they are given to Deputy
- All complaints or incidents that may be related to pesticides receive a response and results are documented on complaint forms or investigative reports
- All investigation and complaint reports are reviewed and approved by the Commissioner once complete
- In last two fiscal years there have been 4 episode investigations, 2 of which were antimicrobial
- All of investigations were non-priority, initiated within three days and completed within two to three weeks, with the exception of receiving analysis samples back from the laboratory for final report.
- All of the investigation reports were complete and none were returned for lack of additional information or supporting documentation

Strengths

- Routing of the investigation/complaint goes directly to the Deputy and review and approval goes directly to the Commissioner. Without any intermediate personnel the reports are processed in a timely manner.
- Low number of investigations and complaints received by the county allows for ability to respond and complete investigations and reports in a timely manner.
- Staff has kept current with investigative training.
- Experienced investigator with good writing skills.
- Our investigative response and reporting has resulted in the following:
    - Effective in providing awareness for worker health and safety issues
    - Conclusive in explaining why or how the episode occurred
    - Allowed us to take appropriate enforcement action when causal violations were discovered
    - Allowed us to take preventative measures at the applicator/business/local program level

Weaknesses

- No areas of investigation response or reporting were identified as needing improvement based on the last two fiscal year DPR Effectiveness Evaluations.

Goal or Objective

- Maintain implementation strategy of current investigative response with regard to:
    - timely initiation and completion of all priority and non-priority investigations
    - use of existing violation analysis and high quality in investigative thoroughness and report accuracy

Deliverables

- Timely episode investigation initiation and completion
- Investigation reports that are accurate and complete

Measure Success

- Review of the number of returned/incomplete investigation reports

C. Enforcement Response

Enforcement Response Evaluation

- All compliance and enforcement actions are prepared by one licensed staff
    - Deputy-20% of PUE duties
- All actions are discussed with the Commissioner prior to implementation (with the exception of violation notices checked off at the time of inspections on inspection forms)
- All actions are reviewed and signed by Commissioner
- Review of the last five years shows that all enforcement actions commenced within two years of the occurrence of the violation, primarily commencing within two months of violation
- Enforcement Response Regulation (ERR) is being implemented and followed to determine most appropriate response when violations and civil penalty actions are identified
- Staff has received DPR provided training on ERR implementation
- If the action or fine deviates from the regulation a justification will be written into the action
- Pesticide use report violations receive warning letters and notice of violations
- Worker health and safety violations receive civil penalty actions, unless first time paperwork violation
- Local worker health and safety violation issues are primarily:
    - Hazard Communication posting
    - Written training plan
    - Application specific information
- All NOPAs provide respondents with detailed information on alleged violations, proposed fine level, and their right for an opportunity to be heard
- A Pesticide Enforcement/Compliance Action Summary is prepared for every action
- All inspections and non-compliances are tracked on an electronic spreadsheet
- All actions are tracked on an electronic log
- Copies of inspection reports and actions are maintained in permit/OID or business files

Strengths

- Limited chain of command within our office allows for timely review and approval of actions
- Maintaining copies of reports and actions within individual files allows for review of violator's history and selection of most appropriate action for the violation.

Weaknesses

- Lack of staff availability for timely follow-up inspection activity

Goal or Objective

- Provide a swift, consistent and fair response to non-compliances that results in future compliance by the respondent while working to maintain the respect of the regulated industry as well as maintaining the integrity of this office.

Deliverables

- Review of Worker Health and Safety regulations annually at grower meetings
- Timely initiation of enforcement response
- Consideration of all appropriate enforcement options
    - Application of Enforcement Response Regulation
    - Use of Citable Sections as resource
    - Application of the Fine Guidelines
- Review of proposed enforcement action with EBL to ensure correct application of ERR
- Enforcement response log updated as actions are completed

Measure Success

- Review of individual files to verify if decrease in repeat non-compliances by violators resulted from new enforcement response.
- Review of enforcement response to determine if effort was directed at violations that pose the greatest risk to people or the environment.